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Michaela Byrne
University of Iowa

Kimberly A. Greder
Iowa State University, kgreder@iastate.edu

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Obesity Risks Among Latino Immigrants in Rural Iowa

Growth of Iowa's Latino population

Latinos are Iowa's largest and fastest growing minority group, and comprise 5.5 percent of the state's total population.¹ Between 2000 and 2013, Iowa's Latino population experienced a 104.7 percent increase.¹ Over the last 12 years, Latino enrollment in Iowa's K-12 schools more than doubled.¹ While rates of obesity have increased among all population groups, obesity is highest among Latinos and other racial and ethnic minority groups.^{2,3}

Obesity Among Latinos in Rural Iowa

An ongoing study by Iowa State University (ISU)⁴ has explored the experiences, challenges, and health outcomes of first-generation Latina immigrants and their families in rural Iowa.⁴ Obesity is one of these challenges.⁴ Nationally, the rate of obesity is higher among families living in rural areas than among families living in urban areas. However, regardless of where they live, Latinos, both youth and adults, face a higher prevalence of obesity than white non-Latinos.^{2,3} Latino immigrants living in rural America are at an especially high risk for obesity.

This disparity can be explained in part by environmental factors. Latino immigrants often exhibited healthier eating habits, lower rates of obesity, and better overall health before moving to the United States (U.S.) than after they have lived in the U.S. for a few years.⁵ After immigrants arrive in the U.S., they commonly experience changes in both diet and lifestyle — such as increased fat and caloric intake and less physical activity — partially due to acculturation.⁶ These changes are often exacerbated by more sedentary employment and environments (less walkable communities), and a variety of other reasons such as healthy food availability, accessibility and affordability, lack of familiarity with U.S. food ingredients and how to use them to prepare healthy dishes, and time resources.⁴ Many of the Latina immigrant mothers in the ISU study report that they do not spend as much time outside as they did in their home countries due to the weather (e.g., cold temperatures, rain), and their children eat fewer fruits and vegetables and more “junk” food since moving to the U.S.⁴ Ultimately, all of these

changes lead to an increased risk of obesity.⁴

Poverty and food insecurity⁷ (limited or uncertain availability and access to food) are significantly more prevalent among the Latino population than the population as a whole⁸, and both factors place people at risk for overweight and obesity.⁹ In the ISU study⁴, Latina immigrant mothers reported difficulty acquiring foods that were “fresh” and affordable in their rural communities. They found it especially difficult to acquire a variety of fresh fruit and vegetables throughout the year, as well as food products and herbs they consumed in their home countries and that helped to transmit their culture.⁴ Mothers stated that the Farmers' Market Nutrition Program (FMNP) coupons helped them purchase fresh fruit and vegetables during the summer. However, they desired to have access to FMNP coupons throughout the year, as well as to more familiar fruits (e.g., guavas and cactus fruit).⁴ Mothers recognized that they prepared cultural food dishes with too much fat such as oil and margarine and wanted to learn how to prepare these dishes with less fat, as well as prepare cultural food dishes their children would like, but did not know how to do this.⁴ In addition, several Latina immigrant mothers expressed concern about changes in their children's food preferences, such as desiring “American” foods such as chicken nuggets, pizza, and french fries rather than foods from their home countries.⁴ Mothers pointed to schools and fast food restaurants as the foremost negative influences on their children's change in eating habits.⁴

In addition to the contextual factors described above, research suggests that there is a strong

link between “toxic stress” (triggered by extreme and/or prolonged adversity) and obesity in both adults and children.¹⁰ Many rural families experience the ongoing stress of social and geographical isolation, limited access to health care, and poverty.⁹ These stressors have effects beyond the parents who are most aware of them. The cumulative stress experienced by a child's mother is an important risk factor of overweight for the child.¹⁰ Iowa's rural Latino families experience high rates of several toxic stressors including (but not limited to) low income, depression, limited English skills, and food insecurity.⁴

Latino immigrant families live in areas/sections of the community where they can afford housing. These areas may not have nearby parks in a safe place or playground equipment that are in good condition.¹¹ This geographical isolation, combined with unfamiliarity in the community, result in fewer opportunities for physical activity.¹¹ For example, rural residents are less likely to actively commute (e.g., walk or bike to work or the grocery store) than urban residents



because rural communities tend to be more spread out, and have few safe walking or biking paths to locations for services (e.g., stores, health facilities, and schools).¹¹ Furthermore, rural communities offer few recreational facilities, sports leagues, and sidewalks when compared to urban communities — all factors linked to increased risk of obesity.¹² For families who have low incomes, the cost of using public facilities such as a swimming pool may be prohibitive. Limited access to recreational facilities is exacerbated during the winter season.⁴

Possible Solutions

Educators should work within communities and partner with families and organizations to create relationships built on trust in order to identify relevant approaches to prevent obesity.¹³

Within Latino immigrant families, mothers see themselves as the primary caregivers of their children and hold a strong sense of responsibility for ensuring their children have nourishing and enough food. However, this can be difficult in their new Iowa communities.⁴

One way to assist mothers is to link them with someone who has the knowledge and skills to grow foods and herbs in the Iowa climate, such as Master Gardener volunteers through Iowa State University Extension and Outreach or another community group.⁴ Additionally, ISU Extension and Outreach educators can help mothers learn how to prepare culturally relevant foods in healthy ways (e.g., incorporating fruits and vegetables and healthy oils, reducing sugar and fat, becoming familiar with U.S. food ingredients and how to use them in food preparation), as well as how to navigate their local food environment to afford healthy

foods, and positively shape their children's food preferences. Furthermore, some of the mothers could be trained in basic nutrition and health concepts, food preparation, and gardening skills so they could then share their new knowledge and skills with other mothers.

Schools are an important place for families to access health information, and can provide an environment that promotes healthy behaviors. Additionally, by increasing representation of Latino immigrant youth and adults on school and community advisory committees, families will have a voice in the development of policies that strongly influence their overall health and wellness. In particular, needs and interests of families can help inform foods served at school.

Throughout the country, locally-based programs have been set up (utilizing the national school lunch program) that keep costs low while offering healthy and culturally relevant food options to students.¹⁴ Partnering with students when developing the school lunch menus, even at the elementary level, creates promising obesity interventions for children.¹⁴ Rural Iowa communities present especially promising venues for this type of local intervention, particularly in the form of “farm to school” initiatives.¹⁵ By partnering with local farmers, Farm to School programs teach children and their families important lessons

about where food comes from and how food choices affect their health. Strong Farm to School programs have been adopted in northeastern Iowa school districts.¹⁵ Local communities also can foster activity by establishing safe routes for students to walk or bike to school. One such program operates in northeast Iowa and focuses on the Five E's: education, encouragement, enforcement, engineering, and evaluation (see www.iowafoodandfitness.org/site/srts.html).

Obesity is an issue that must be addressed at many levels with community support. Latina immigrant mothers have expressed a strong desire to develop the knowledge and skills needed to provide themselves and their children with a healthier lifestyle. Along with this, communities should foster practices that prevent obesity by helping families access a variety of healthful and affordable foods year round, encouraging and enabling daily physical activities, and bringing families together with community leaders to share their concerns and ideas. Together, we can work to build stronger, healthier communities for all Iowans.

Authors: Michaela Byrne, JD/MPH graduate student, University of Iowa. Kimberly Greder, Associate Professor and Human Sciences Extension and Outreach Program Specialist, Iowa State University.

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